

ABSTRACT

5 The present invention relates to a modular interconnection architecture for an expandable multiprocessor machine. It comprises a first interconnection level (MI) comprising connection agents (NCS_i) that connect the multiprocessor modules and handle the transactions between the multiprocessor modules, and a second interconnection level (SI) comprising external connection nodes (NCE_j) that connect the nodes (N_j) to one another and handle the transactions between the nodes (N_j). Each external connection node (NCE_j) comprises two connection agents identical to the connection agent (NCS_i), connected head-to-tail, one of the two agents (NCS'_j) receiving and filtering the transactions sent by the node (N_j) to which it is connected, and the other agent (NCS''_j) receiving and filtering the transactions sent by the other nodes (N_j) to which it is connected.

10 Its applications specifically include the construction of an entire range of machines: UMA, QUASI-UMA, NUMA, cluster, etc.

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FIG. 5